Aegis Briefing



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Today's Session

- Introductions
- Working successfully in teams
- Starting Points for ideas
- Sense-making the context
- Designing a response
- Evaluating and Developing ideas
- Business Plans
- Formative Pitch

Working successfully in Teams

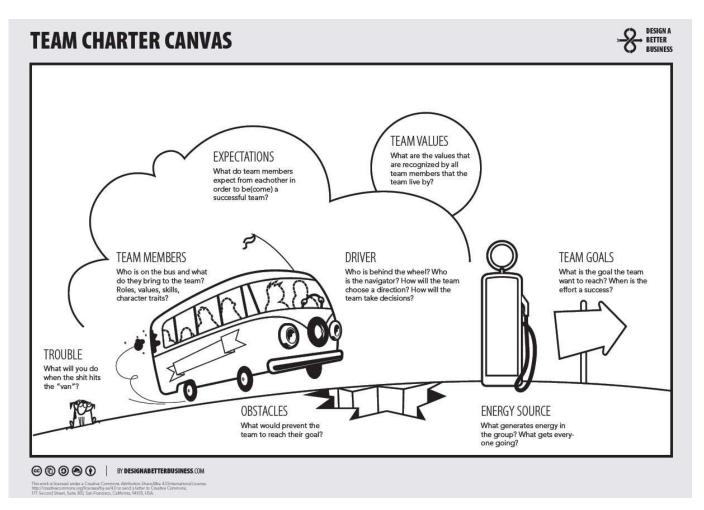




Working in groups: contributions, roles, and rules

- Think about your individual goals and for the challenge:
 - Write 3 down what are you hoping to get by participating?
- What is everyone bringing to the project; specific skills or interests?
 - Write 3 things down you think you can bring to the team or challenge?
- What are you less confident of? What might be something you need to work on?
 - Write down 3 things that might be a stretch or personal challenge
- Discuss!
 - How can you make the most of what you have (and patch what you don't)?
 - Consider formal roles or allocated duties
 - Set some Ground Rules for how you'll meet, communicate, and manage tasks.

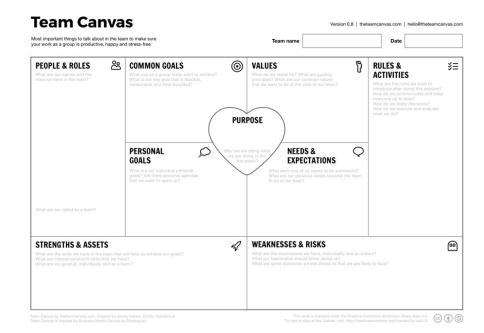
Team Charter Canvas



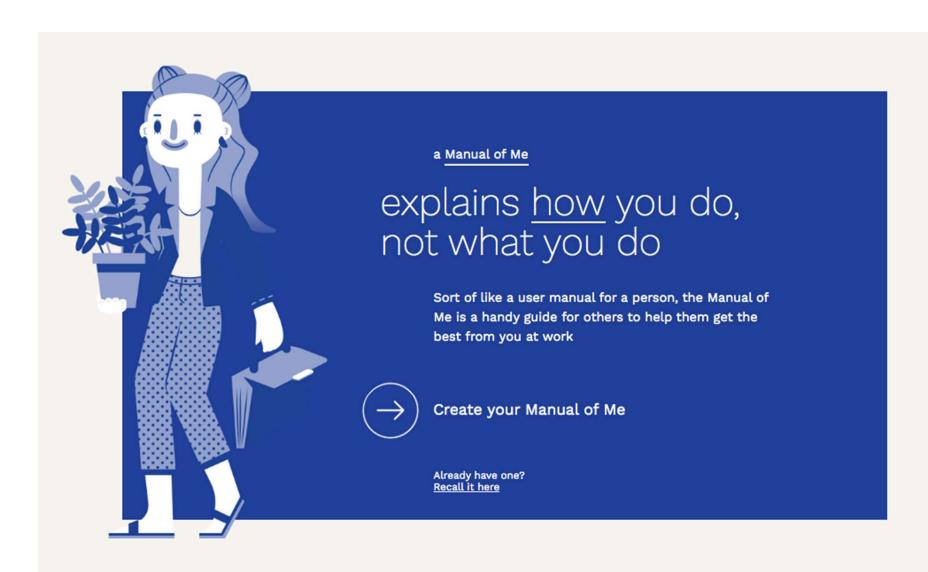
https://www.designabetterbusiness.tools/tools/team-charter-canvas

Good Practice: Next Steps

- You may go through Tuckman's Stages:
 - Forming
 - Storming
 - Norming
 - Performing
- Plan to do so don't pretend you won't!
- Do some alignment work together:
 - http://theteamcanvas.com/

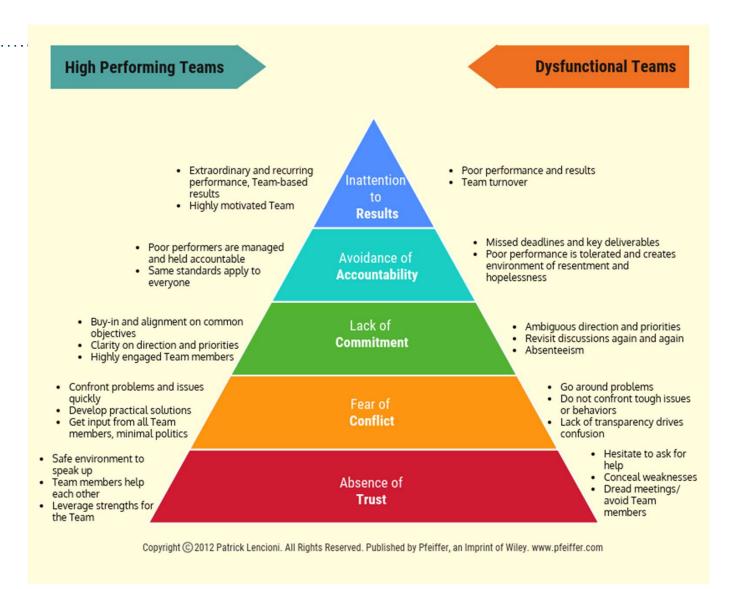


Denise A. Bonebright (2010) 40 years of storming: a historical review of Tuckman's model of small group development, Human Resource Development International, 13:1, 111-120, DOI: 10.1080/13678861003589099



Do it: https://www.manualof.me/ Learn about it: https://medium.com/leapers/introducing-manual-of-me-91021385d812

Overcoming Team Dysfunction

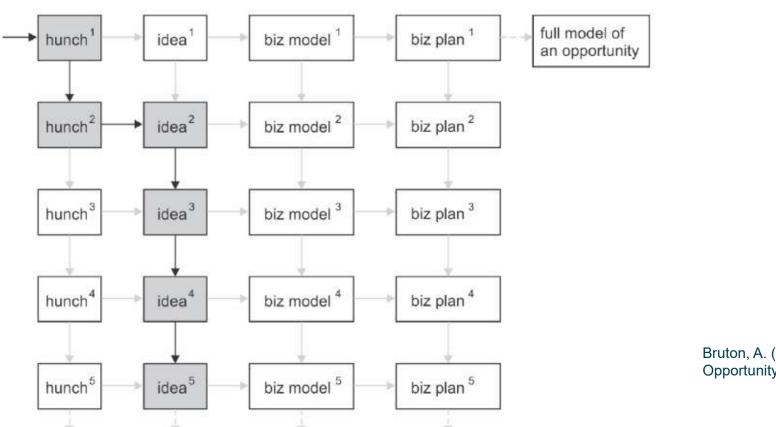


Starting Points





The idea development process is not linear...



Bruton, A. (2016) Deliberate Opportunity Design (DOD)

Good ideas come from 'Spare Parts' and 'Firewood'

Practice origin: Stephen Johnson 'Where good ideas come from' (2011)



Photo by sergio souza on Unsplash

Spare Parts – Starting Points

Practice origin: Stephen Johnson 'Where good ideas come from' (2011)

Spare Parts or Starting Points are essential elements of the self-assembly approach to developing ideas.

It's using your own context and experience as the source of ideas of value.

A gathering of hunches, interesting test results, and unexpected revelations that make good ideas accessible to everyone.

https://www.telegraph.co.uk/culture/books/8141223/Where-Good-Ideas-Come-From-by-Steven-Johnson-review.html

These are all Starting Points

- "Opportunities" a pressing problem/opportunity that you've identified
- "Pain points" a pain point that impacts you or others
- "Topics" a topic that excites you
- "Trends" a trend you would like to explore
- "Hunches" a hunch or theory you have
- "Ideas" an idea you've been thinking about

What starting points can you identify for your own challenge?

New tech opportunities? User pain points? Emerging trends? Novel methods or approaches? Niche use-cases?

In groups, share some starting points then...

#1 Categorise:

- Opportunity
- Pain Point
- Topic
- Trend
- Hunch
- Idea

#2 Dig deeper:

- Why?
- Why?
- · Why?
- Why?
- **Why?**

#3 Scan:

- Social trends
- Tech trends
- Economic trends
- Environmental trends
- Political/Policy trends
- Legal trends
- Ethical trends

Making Sense



Understanding the systems and contexts within which an idea exists

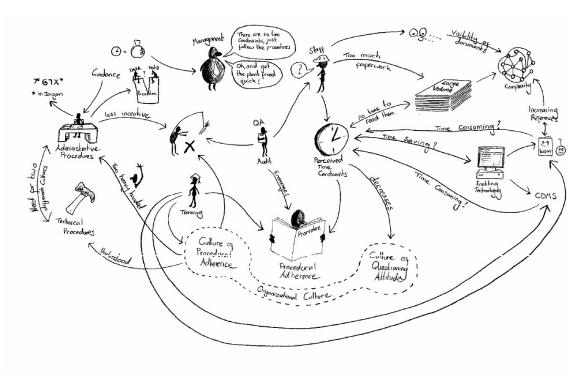


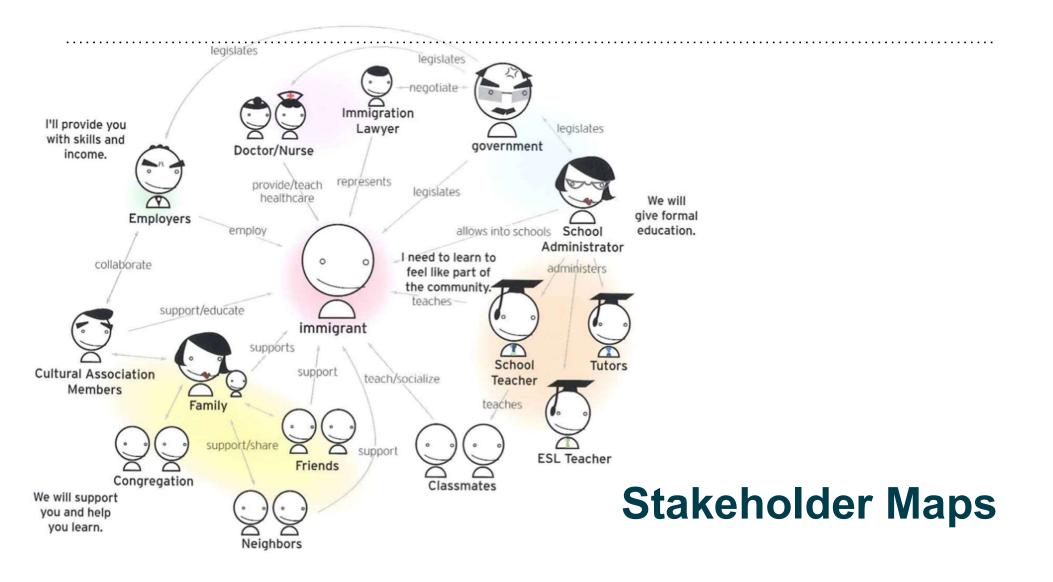
Find a pattern to interrogate the system

Problem Structuring:

- What is the problem?
- Why is it a problem?
- When is it a problem?
- How is it a problem?
- Where is it a problem?
- Who is it a problem for?

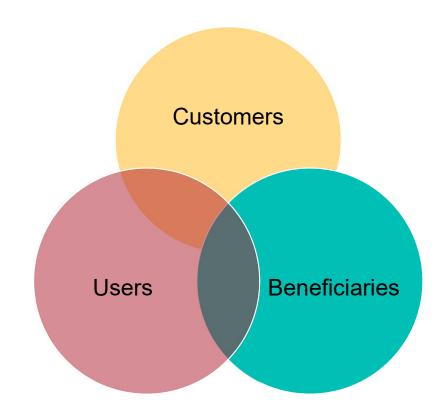
'Rich Pictures':

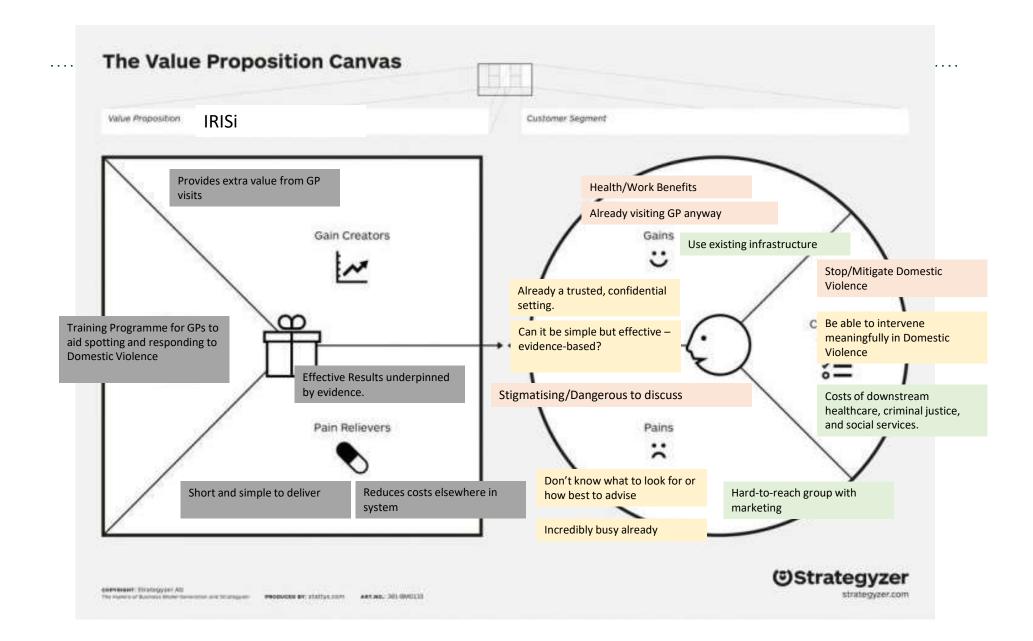




System Actors

- When you consider your starting point:
 - Who are the customers, who 'own' the decision-making? (the 'gatekeepers')
 - Who (or what) are the users, who (or what) is using your idea to deliver change?
 - Who are the beneficiaries, who gets impacted positively?





Taking the first step

- Getting started is the hardest bit
- Identify a grand goal
- Identify the gap you're trying to bridge
- Consider your options
- Find a place you're able to start

GROW

- Goals what will success look like?
- Reality where are you now?
- Options how could you bridge the gap? (How Might We?)
- Willingness which option are you willing and able to take?

Group Task – 15 minutes (it's a rapid work-through!)

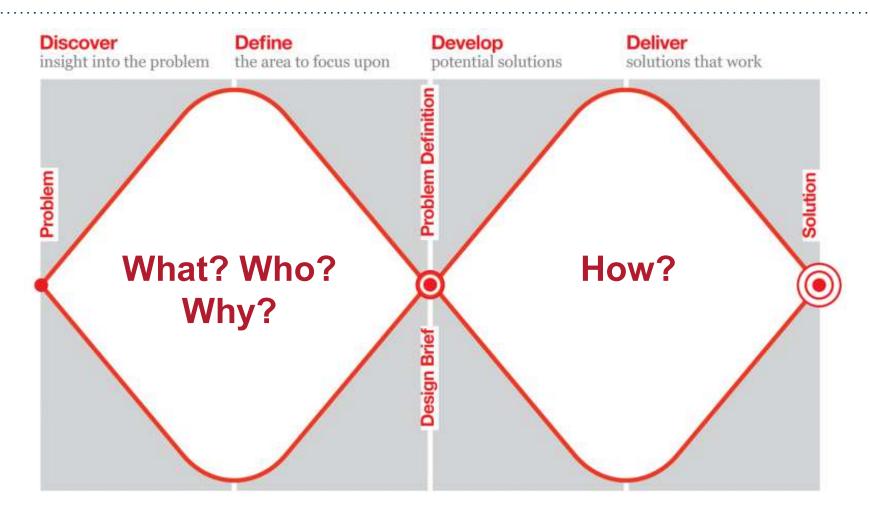
- Pick one <u>starting point</u> from those you've identified
 - If it's a problem fine
 - If it's a solution you might need to identify the problem it solves!
- Identify the <u>System Actors</u> (5 minutes)
 - (Beneficiaries, Users, Customers)
- Identify 3 potential actors <u>you could engage</u> to effect change (5 minutes)
 - (Influence vs Interest)
- Work through the <u>GROW model</u> (5 minutes)
 - (Goals, Reality, Options, Willingness)
- You might generate more questions than answers that's expected!



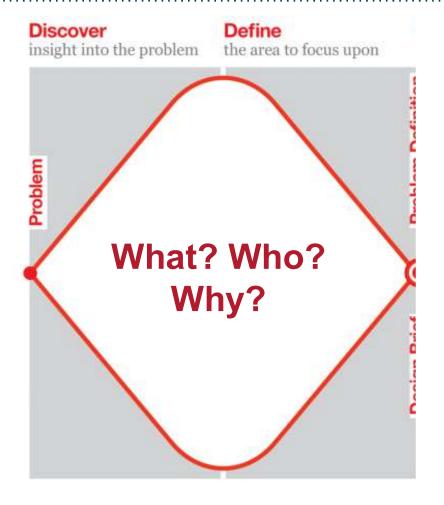
A Process of Designing

Introducing *Design Thinking* as a framework for exploring problems and ideas





The Design Council's Double-Diamond design process.



Discovery & Definition:

- Secondary Research
- Primary Research
 - Stakeholder engagement
 - 'User Experience'
 - 3M's research model:
 - Observation
 - Ask questions
 - Experiment and prototype
- · Prioritisation of issues found
- What can be acted upon?

The Design Council's Double-Diamond design process.

Problem Statements

Who needs a way to do What because Why is important.

Dave needs a way to help him exercise because he struggles to find the time.

GlaxoSmithKline needs a way to test clinical products in routine care settings because they know patients can't always take their medication when they should.

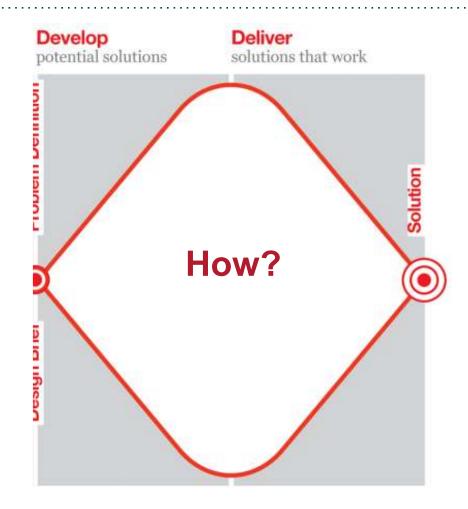
Why? Why? Why? Why?

Generate some initial problems...

Who needs a way to do What because Why is important.

Ideation & Prototyping:

- Generate lots of ideas
- Evaluate those ideas
- Test and Prototype them
- Select the best...



The Design Council's Double-Diamond design process.

Creativity Defined:

- Creativity is the ability to generate ideas
- It is **not** musical or artistic ability

How creative are you feeling?

- Creativity Exercise #1
 - Individual Exercise:
 - 1 minute
 - How many ways can you use the mystery object?



- Creativity Exercise #2
 - Group Exercise:
 - 2 minutes
 - How many ways can you use the mystery object?



Defining Innovation

- "An Innovation is the implementation of a new or significantly improved product (good or service)."
 - OECD: Oslo Manual
- An idea acted upon.
- Success in innovation is measured by its adoption or impact, not its novelty.

- Product Innovation a new product or service (with significant new or improved features)
- Process Innovation a new or improved production or delivery method
- Marketing Innovation changes to positioning, pricing, packaging etc
- Organisational Innovation changes to a firm's practices, organisation or external relations (including the Business Model)

What drives new ideas and innovations?

- Need: identification of problems encourages people to solve them
- Possibility: another breakthrough provides a 'stepping stone'. Someone asks "what if?"

- Connections & networks
- Time and space to explore
- 'Spare parts'
- Bravery & foolishness
- "Engineered serendipity"

Ask the right question...

- How do I build a better mousetrap?
- How do I catch more mice?
- What is a shoebox for?
- What could you use a shoebox for?
- How many uses can you think of for a shoebox?
- Can you think of 100 ways to use a shoebox?





Idea-generation principles

- Diverge first!
- Reserve judgement
- Permit the Silly/Crazy/Useless (No Criticism)
- Stretch 'generate 100'
- Re-express / Illustrate / Build on other's Ideas
- Wear someone else's shoes
- Constraints can give direction

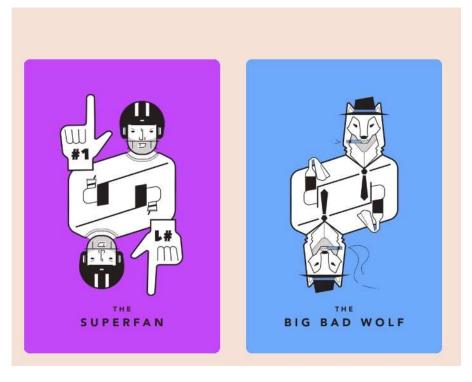
SCAMPER

- Substitute (materials)
- Combine (purposes)
- Adapt (for...)
- Modify (scale up or down)
- Put to alternative use
- Eliminate (an element)
- Reverse

Generate some initial solutions...

Unintended Consequences

- A systems-based approach also helps identify the wider impacts of innovation...
 - How might a 'superfan' of your idea take it too far?
 - How might a 'bad actor' abuse your idea?
 - Who or what else disappears or is marginalised if your idea succeeds?



http://tarotcardsoftech.artefactgroup.com/



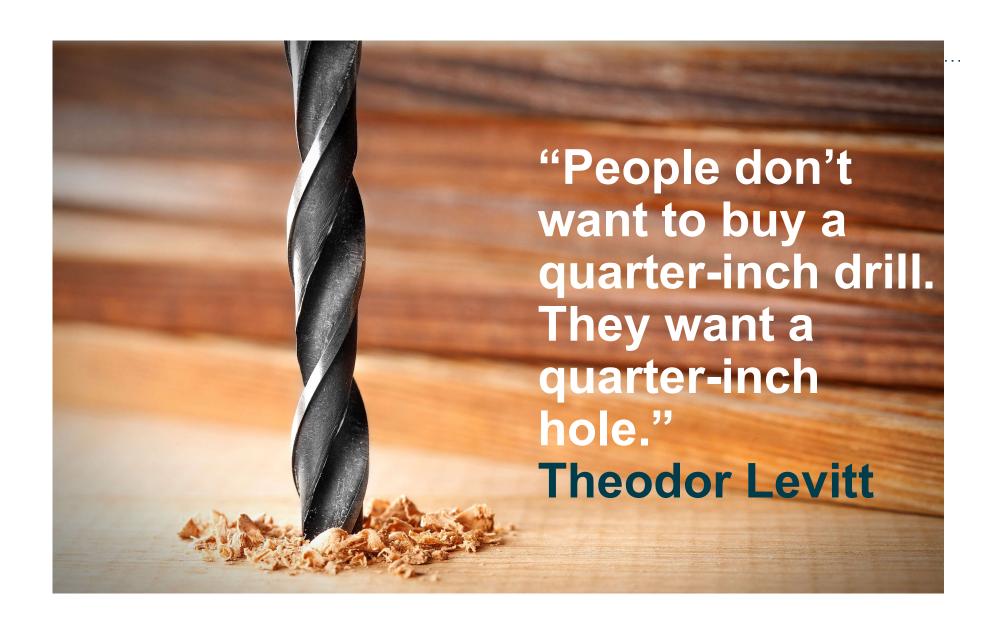


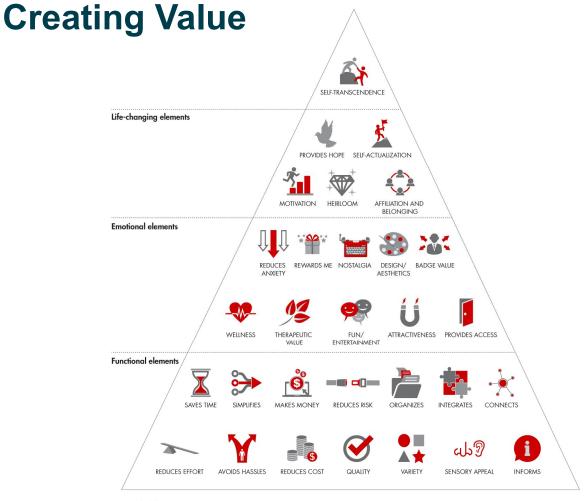


3 Types of Fit

- On paper Problem-Solution Fit, works in principle but unproven in practice.
- <u>In the market</u> *Product-Market Fit*, Evidence of customer traction gained through iterative process of testing and validating assumptions. May require a pivot.
- <u>In the bank</u> *Business Model Fit*, Evidence of a route to market and a sustainable business model (maybe even potential for further growth).

Osterwalder & Pigneur: Business Model Generation.





If we have successfully identified and empathised with our users and stakeholders, we can start to identify the values they seek from any interaction.

This is a model developed by consultants Bain & Co as a model for understanding those values. It's a useful starting-point for thinking about framing the value of your offer.

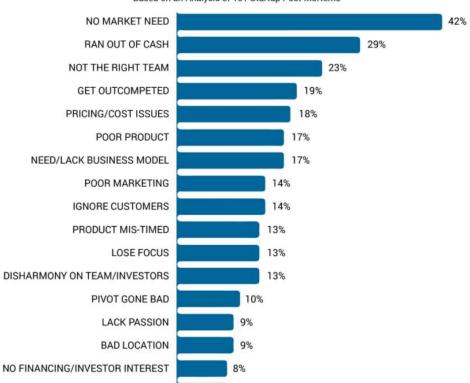
How might you frame the value sought by your users and stakeholders in simple terms?

© 2018 Bain & Company, Inc.

Validating the problem: the fate of start-ups and spin-outs

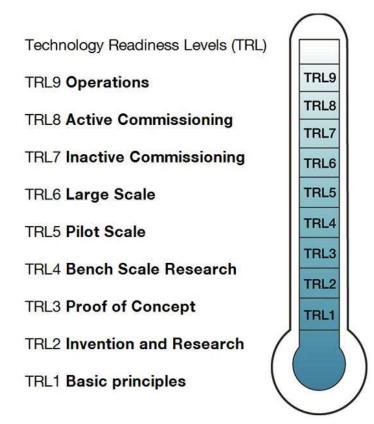
THE TOP 20 REASONS STARTUPS FAIL





https://www.cbinsights.com/research/startup-failure-reasons-top/

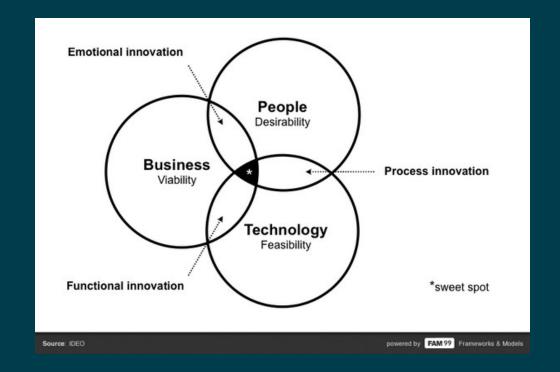
The fate of research ideas



https://www.gov.uk/government/news/guidance-on-technology-readiness-levels

How do you evaluate an idea as a business idea?

- Desirability: Do (enough)
 people want it (more
 than the alternatives)?
- Feasibility: Can it be made? Will it work?
- Viability: Do the profits outweigh the costs? Can it be sustained and scaled?



The Change Adoption Curve: Everett Rogers (1962) Different people have different problems...

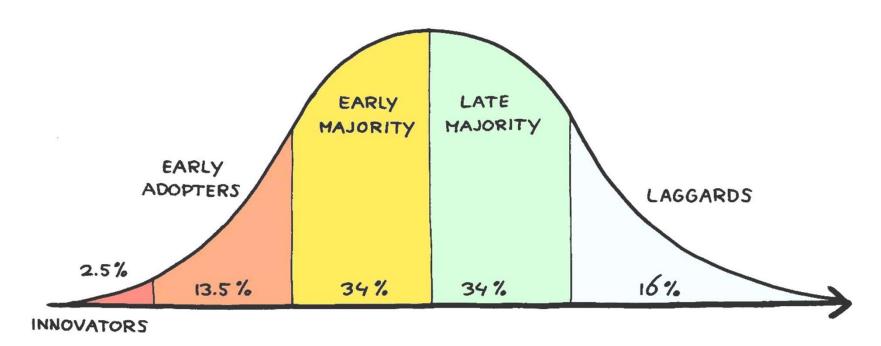
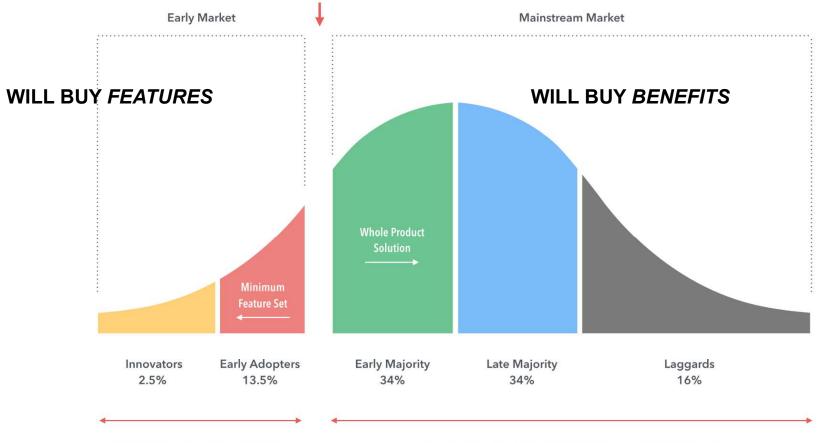


Image: https://www.asaecenter.org/resources/articles/an_plus/2017/september/rethinking-the-change-adoption-curve

Crossing the Chasm... Geoffrey Moore (1991)



People Who Want Newest Things

People Who Want Complete Solutions and Convenience

Customers only take action if the need is pressing

Would you seek help with

- A stinging nettle rash?
- A deep but small cut on your arm?
- A broken leg?
- Choking on food?
- A heart attack?

Is the need so pressing that they are seeking solutions?

How are your products/services improving lives?



Things to grow

Time and money
Happiness and fulfillment
Confidence + aspiration
Skills and capability
Employability
Friends and Status
Wealth and comfort
Health and fitness



Easier days

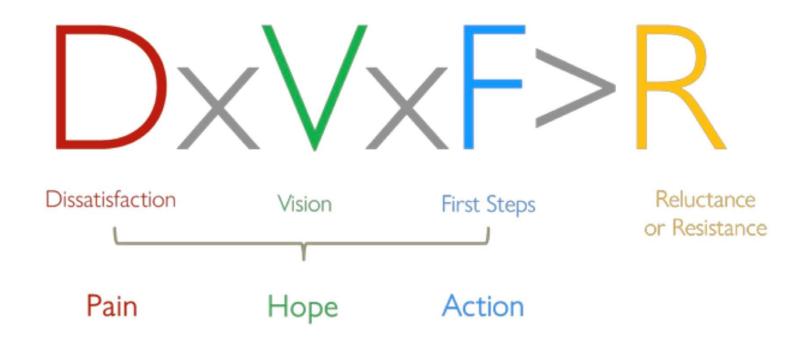
Less cost and effort
More fulfilling
More predictable
Fewer mistakes
More fun and laughter
More companionship
Less tiring / frustrating
More freedom / relaxing



Things to shrink

Wasted time and cost Physical / mental pain Stress and misery Effort to do things Debt and worry Bad habits + behaviours Mental / physical blocks Weight and ill health

The Formula for Change

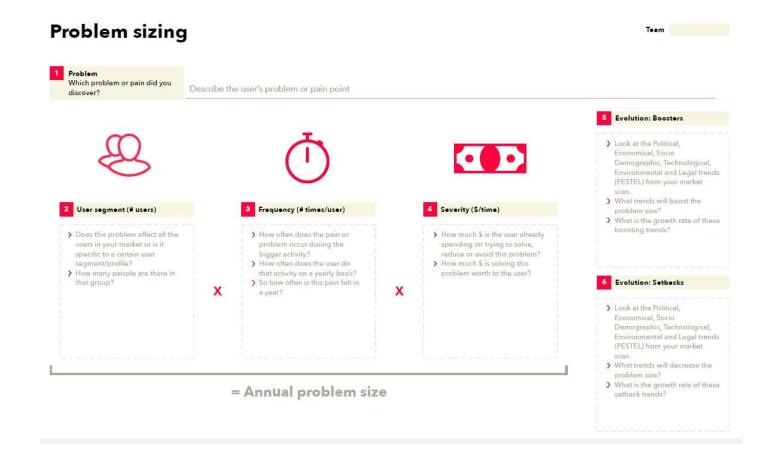


Dannemiller & Jacobs, 1992

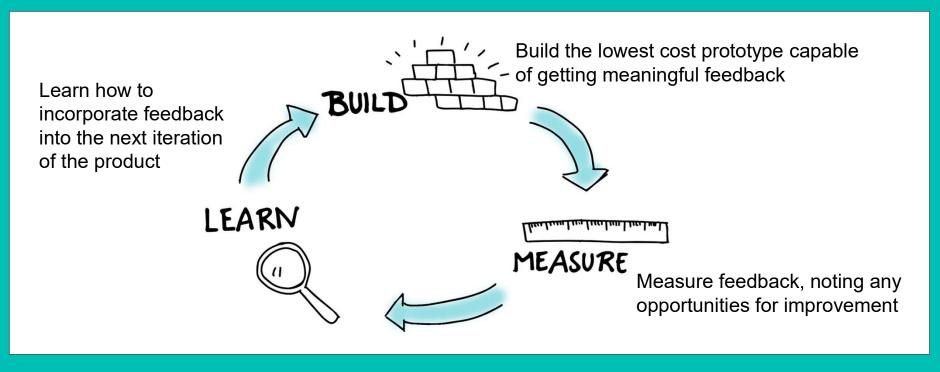
Try and complete an Idea Canvas

dea Canvas 🔛	Name:	Contact:	mali
1. PROBLEM 50. you have an also, that's gwar But solutined-until problem, does your idea solve?	KEY ASSUMPTIONS	2. SOLUTION Whater year also and haracture studies the problems?	KEY ASSUMPTIONS
How big is the potential resolut?		Whateakes this better than existing alternative solutions?	
3. FIRST USERS / CUSTOMERS Who experiences the problem must existly be. Who will be the first people to use or buy year solution."	KEY ASSUMPTIONS	4. REVENUE MODEL Sounds goat, had one rare detail you would to explaine How cell you actually make namely?	KEY ASSUMPTIONS
How will you much them?		West will previous ge?	

if you have just a problem... use the problem sizing canvas



Co-create new products with your prospective customers



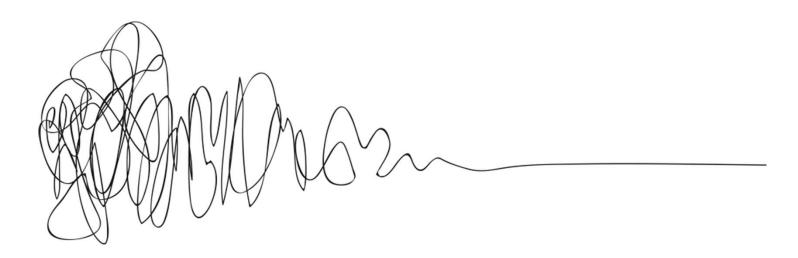
Eric Ries: The Lean Startup



The Design Squiggle

Noise / Uncertainty / Patterns / Insights

Clarity / Focus



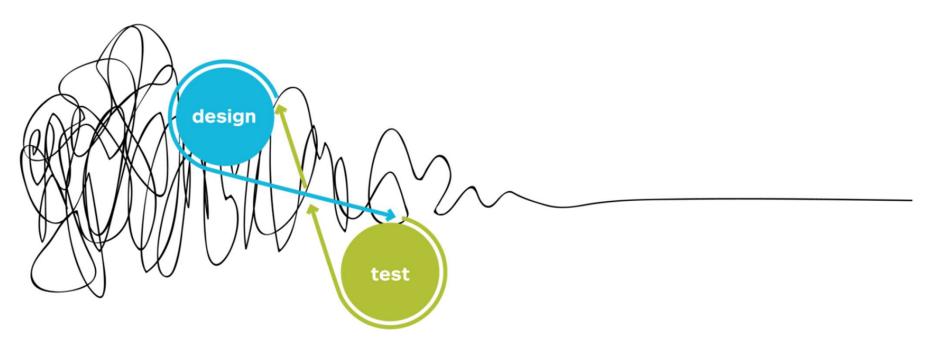
Research & Synthesis

Concept / Prototype

Design

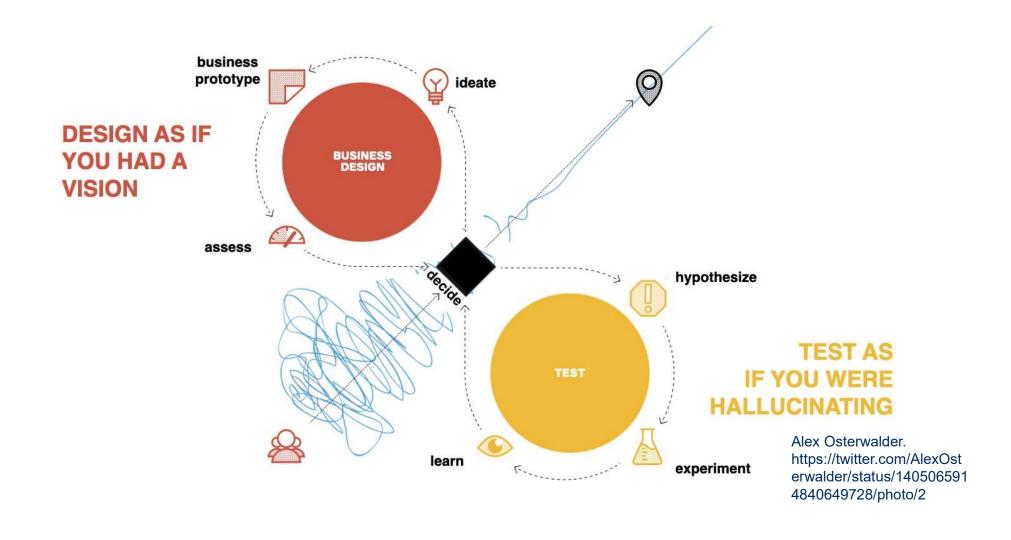
Source: Damien Newman

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Strategyzer.

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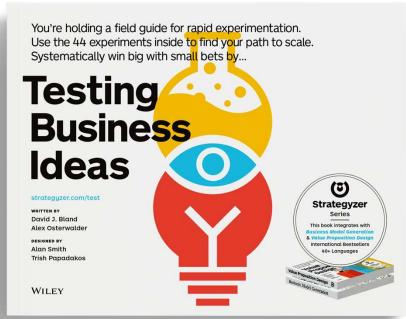


"It doesn't matter how beautiful your theory is, it doesn't matter how smart you are. If it doesn't agree with the experiment, it's wrong."

Richard Feynman, Theoretical Physicist.

Very useful books - Strategyzer





Images: https://www.strategyzer.com/books



What goes into a business plan to make it convincing?



- What is a Business Plan?
 - A methodology?
 - A blueprint?
 - A forecast?
 - A guess?
 - A snapshot in time?
- · All of the above.
- A compelling story (with evidence)
- A set of qualified assumptions.



- Why do you need one?
 - To work to?
 - To share?
 - As a thinking exercise.
- If you can't articulate it that might be a problem...
- Share with who?
 - Investors
 - Customers
 - Your Team

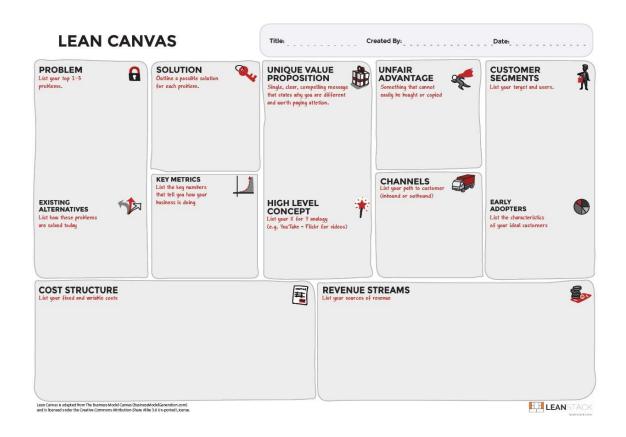


- No ideal size or structure.
- Exec summary is a must.
- Then lead with whatever is most compelling...
- Provide evidence that qualifies the assumptions you're making.

'Typical' Elements:

- Product/service description what is it?
- Market analysis who wants it?
- Competitor analysis who are we up against?
- Strategy how will we succeed?
 - Pricing
 - · Route to Market
 - IP/barriers to entry
- Logistics/operations details, details...
- Team who are we?
- Financials do the numbers add up?
 - Where does the money come from
 - Including potential exits

A Business Plan on one page? Try the 'Lean Canvas'



The Elevator Pitch

- Who are you?
- What is it: either:
 - 1: *This* is a problem, *here* is our solution.
 - 2: *This* is our idea, it solves *this* problem.
- Why: It's better than the existing options because...
- (If you have time): **How** you'll achieve this...



www.bristol.ac.uk/innovation

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